

SPACE WARFIGHTING CONSTRUCT

The Space Warfighting Construct is the framework for making the Space Enterprise Vision an operational reality; it prepares Air Force Space Command for a conflict that extends into space.

Situation

For decades the United States has enjoyed unimpeded freedom of action in the space domain. This has allowed us to deliver space capabilities that include: intelligence collection, missile warning, weather monitoring, satellite communications, and precise positioning, navigation, and timing essential to US Armed Forces that operate globally with unmatched speed, agility and lethality. However, the environment has changed. Our potential adversaries understand the competitive advantage we derive from space capabilities, and view our reliance on them as a vulnerability. They are working hard to exploit that reliance with kinetic and non-kinetic means intended to deny, disrupt, degrade, and destroy our space systems. The current space enterprise was not designed or optimized to fight through and deliver key warfighting effects in, from and through today's contested space domain. Though our goal is to avoid conflict, we must be prepared if it occurs. Evolving the space enterprise to a more robust and resilient architecture underpinned by better situational awareness and responsive command and control will provide space leaders with tools, decision aids and response options necessary to prevail if conflict extends into space.

SPACE WARFIGHTING CONSTRUCT

Space Enterprise Vision

Vision of a space enterprise that can fight through conflict

Space Warfighting CONOPS

Strategic C2

SSA and I&W

Integrating CONOPS

How we fight to ensure success as a national security team

Space Mission Force

Preparing warfighters for combat against a thinking adversary

Resilient Architecture

Our deployed force structure and supporting systems

Enterprise Agility

Ability to outpace the threat with DOTmLPF-P and materiel solutions

Partnerships

Integrating the capabilities of USG (DoD/IC/Civil) with Allies and the Commercial Sector

Space Enterprise Vision

The SEV, developed jointly by Air Force Space Command and the National Reconnaissance Office (NRO) in 2015, charts a course to a resilient space enterprise by 2030 that is able to deter aggression within the space domain and, when necessary, prevail in a multi-domain conflict that extends to space. The Vision challenges us to change long-held operating practices and principles, effective in their time, but unsuited to outpacing rapidly maturing threats or to take advantage of fundamental changes in the global space order. The SEV articulates the attributes and imperatives of a force postured to defend and protect through all phases of conflict and sustain the strategic advantage enjoyed by America's joint and coalition warfighters.

Concepts of Operation

Using time- and technology-tested principles of war, planners determine the most effective application of military capability to achieve commanders' objectives. These are documented as operational concepts, matured through analysis and war games, and inculcated into operating forces through training and exercises. The Air Force and NRO developed a series of integrated CONOPS to strengthen partnerships and provide unity of effort across the national security space enterprise. Together, they describe how we will use the full spectrum of doctrine, organization, training, materiel, education, personnel, facilities, and policy options as part of a joint force conducting multi-domain operations to meet national objectives.

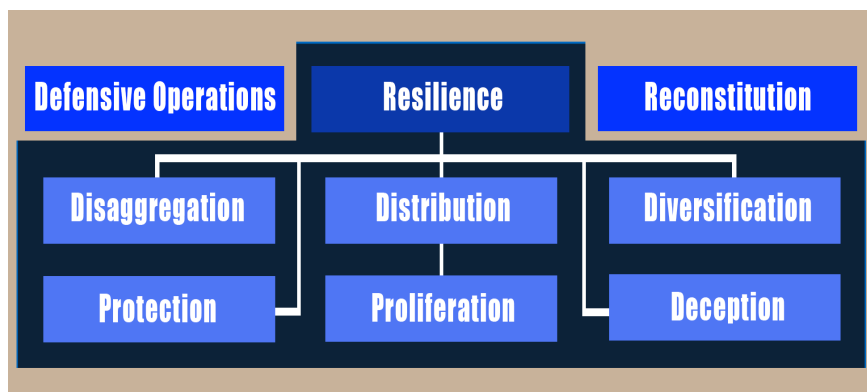


Space Mission Force



The SMF is the human capital of our space warfighting construct. Specifically, the SMF revolutionizes the way we train our space forces to successfully operate in an increasingly contested, degraded and operationally-limited environment. The goal of SMF is to prepare our crewmembers to recognize and react to adversary threats with advanced training scenarios that hone their warfighting skills and stimulate the development of Tactics, Techniques, and Procedures that will allow our forces to maintain freedom of action across the spectrum of conflict. The SMF normalizes space training with the rest of the Air Force, provides higher confidence in our readiness levels and mission capabilities, and ensures a more consistent presentation of space forces to Combatant Commanders, whether operating from garrison or a deployed location.

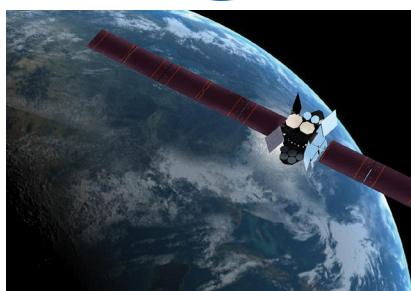
Resilient Architecture



Space forces will benefit from more resilient architectures both on the ground and in space. On-orbit architectures will employ multiple attributes of the mission assurance taxonomy to ensure they are able to deliver persistent, critical space warfighting capabilities in the face of direct attack, ensuring that joint and combined warfighters will prevail in conflict. These attributes will extend to the ground, where a resilient architecture includes integrated, interoperable ground stations across DoD and partner organizations, a ground network governed by common operating and data sharing standards that enables proliferated, defensible command and

control systems, and timely delivery and exploitation of available health, status and threat information. The architecture is activated via persistent situational awareness, synchronized by a modern battle management, command and control system and informed by a scalable and adaptive common operating picture enabling real-time decision-making at appropriate echelons of command. It is also imperative that the ground architecture and data standards are compatible with command and control systems of air, cyber, land and maritime forces to facilitate multi-domain operations.

Enterprise Agility



The warfighting construct demands that we be responsive to new and changing threats, and can rapidly integrate new capabilities to make our warfighting force more effective. This agility must extend through the entire space warfighting enterprise, to include how we learn about the threat; develop solutions; acquire, test, deploy, and operate new systems; and ensure our space mission force is ready to defeat a thinking adversary in a complex, multi-domain battlespace. The enterprise will use all of its elements to speed decision-making, prototype potential solutions, rapidly integrate decision-making tools and sustain a war-winning capability by delivering multi-domain effects in, from, and through space and cyberspace.

Partnerships

Our national security objectives are achieved through partnerships within the US Government (DoD/IC/Civil) and with the growing capabilities of Allies and the commercial space sector. Each partner has unique strengths that they can bring to bear in support of the goal to deter and dissuade a conflict from extending into space. Developing and integrating these partnerships into our enterprise is key to its success.

“Our vision is to first normalize space operations as a joint warfighting domain; no different than any other warfighting domain. Only when we think about and talk about space in the same way we talk about operations in the air, on land, at sea, or in cyber will we move in the direction of truly integrating space operations across all warfighting domains”
— Gen. Goldfein, CSAF, 3 Feb 2017